

# Work Order ID 53512

November 6, 2009 4:09:49 PM



Page 1

Item ID: D3463-042

Accept



Setup Start



Revision ID: B

Stop



Item Name: Step Weldment Assembly

Start Date: 06/11/2009 Start Qty: 4.00



Cust Item ID:

Required Date: 17/11/2009 Req'd Qty: 4.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start



Stop



| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Draw<br>Number | Draw<br>Rev. | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------|----------------------|----------------|--------------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|----------------|--------------|--------------|---------------|---------------|------------------|----------------|

| Draw Nbr | Revision Nbr |
|----------|--------------|
| D3463    | Rev B        |

100  
  
Large Fab  
Large Fab  
Large Fab

Large Fab

0.00

0.00

Weld assembly as per dwg D3463 using DT8875

EL 9-11-10 (X4)

PTO  
~~10/11/10~~  
~~10/11/10~~

110  
  
QC  
Quality Control

QC9- Inspect visual per QSI004- Fusion Welds

0.00

0.00

Memo

PD 09.11.10 (9)

120  
  
QC  
Quality Control

QC5- Inspect part completeness to step on W/O

0.00

0.00

Memo

4 10-11-10

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: D3463-042 PAR #: \_\_\_\_\_ Fault Category: Machined Parts NCR: Yes No DQA: ✓ Date: 09-11-18  
 Resolution: Scrap Disposition: Scrap QA: N/C Closed: ✓ Date: 09-11-18

| NCR: <u>53512</u> |      | WORK ORDER NON-CONFORMANCE (NCR)  |                             |   |                     |                           |                       |                          |
|-------------------|------|---|-----------------------------|---|---------------------|---------------------------|-----------------------|--------------------------|
| DATE              | STEP | Description of NC<br>Section A  | Corrective Action Section B |   |                     | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|                   |      |   | Initial<br>Chief Eng        | Action Description<br>Chief Eng   | Sign &<br>Date      |                           |                       |                          |
| 09-11-10          | 100  | Qty 1 D3463-7 mm was found to be slightly short and was pulling the step. Machined parts. (milling)<br>RC: L.O.A. | <u>QSIWLC</u>               | Scrap: remove & replace<br>Qty 1 D3463-7<br>All others <del>are</del> are good. | <u>✓</u><br>7-11-10 | <u>✓</u><br>09-11-10      | <u>✓</u><br>09-11-10  | <u>✓</u><br>09-11-10     |
|                   |      |   |                             |   |                     |                           |                       |                          |
|                   |      |   |                             |   |                     |                           |                       |                          |

NOTE: Date & initial all entries

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|                |                        |            |      |               |       |  |
|----------------|------------------------|------------|------|---------------|-------|--|
| Item ID:       | D3463-042              | Accept     |      | Setup         | Start |  |
| Revision ID:   | B                      |            |      |               | Stop  |  |
| Item Name:     | Step Weldment Assembly |            |      |               |       |  |
| Start Date:    | 06/11/2009             | Start Qty: | 4.00 | Cust Item ID: |       |  |
| Required Date: | 17/11/2009             | Req'd Qty: | 4.00 | Customer:     |       |  |
| Reference:     |                        |            |      |               |       |  |

|            |               |       |            |       |     |       |  |
|------------|---------------|-------|------------|-------|-----|-------|--|
| Approvals: | Process Plan: | Date: | Tooling:   | Date: | Run | Start |  |
|            | QC:           | Date: | SPC (Y/N): | Date: |     | Stop  |  |

| Sequence ID/<br>Work Center ID          | Operation<br>Description   | Set Up/<br>Run Hours | Draw<br>Number     | Draw<br>Rev.    | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|---|--|----------------------|--------------------|-----------------|--------------|---------------|---------------|------------------|----------------|
| 130<br><br>Powdercoat<br>Powder Coating | White Gloss(Ref:4.3.5.2) per QSI005 4.3-Steel<br><br>Memo<br>1- Mask areas indicated on dwg D3463 (holes, threads) <input type="checkbox"/> START<br>TIME: <u>2:20 pm</u> <input type="checkbox"/> OVEN TEMPERATURE:<br><u>2:60 pm</u> FINISH TIME: <u>4:00 pm</u> | 0.00<br><br>0.00     | <u>M112148</u>     | <u>09/11/11</u> |              | <u>X4</u>     | <u>8</u>      |                  |                |
| 140<br><br>HandFinish<br>Hand Finishing | Pressure Wash per QSI005 4.3<br><br>Memo<br><u>Wing Walk M 112623</u><br><u>09/11/11</u>   | 0.00<br><br>0.00     | <u>BL 09-11-11</u> |                 |              | <u>4</u>      |               |                  |                |
| 150<br><br>QC<br>Quality Control        | QC3- Inspect Part Finish<br><br>Memo   | 0.00<br><br>0.00     | <u>MD 09/11/11</u> |                 |              | <u>X4</u>     |               |                  |                |

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Item ID: D3463-042

Accept



Setup Start



Revision ID: B

Stop



Item Name: Step Weldment Assembly

Start Date: 06/11/2009 Start Qty: 4.00



Cust Item ID:

Required Date: 17/11/2009 Req'd Qty: 4.00



Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

160

Identify as per dwg & Stock Location: \_\_\_\_\_

0.00



Packaging

Memo

0.00

Packaging

9/11/09

QDS

170

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

09/11/12

MF 09-11-12

# Picklist Print

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Work Order ID: 53512

Parent Item: D3463-042RevB

Parent Item Name: Step Weldment Assembly


Comments:

Start Date: 06/11/2009

Required Date: 17/11/2009

Start Qty: 4.00

Required Qty: 4.00

| Component Item ID/<br>Item Name  | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Remaining<br>Qty To Pick | Qty<br>Issued | Date<br>Issued | Status |
|--|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|--------------------------|---------------|----------------|--------|
| 238-806<br><br>SS DOWEL PIN 1" LONG |                        | Purchased     | No          |                     |                  | 100             | Each               | 96.0000        | 8.0000                   |               | EL 7-11-9      |        |

Warehouse                      Loc Qty                      Loc Code  
Location

Main Warehouse

ST    96

105037    3

111088    89

19080    4

D3453-3RevB                      Manufactured                      No                      100                      Each                      0.0000                      4.0000



Clevis

D3453-5RevB                      Manufactured                      No                      100                      Each                      10.0000                      4.0000



Plug

Warehouse                      Loc Qty                      Loc Code  
Location

Main Warehouse

ST    10

52985    10

D3463-1RevB                      Manufactured                      No                      100                      Each                      18.0000                      4.0000



Arm

Warehouse                      Loc Qty                      Loc Code  
Location

Main Warehouse

ST    18

46148    18

# Picklist Print

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Work Order ID: 53512

Parent Item: D3463-042RevB

Parent Item Name: Step Weldment Assembly

Comments:

Start Date: 06/11/2009

Required Date: 17/11/2009

Start Qty: 4.00

Required Qty: 4.00

| Component Item ID/<br>Item Name | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Remaining<br>Qty To Pick | Qty<br>Issued | Date<br>Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|--------------------------|---------------|----------------|--------|
| D3463-3RevB                     |                        | Manufactured  | No          |                     |                  | 100             | Each               | 76.0000        | 4.0000                   |               |                |        |
| Step                            |                        |               |             |                     |                  |                 |                    |                |                          |               |                |        |

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST 76

44606 1

46149 24

46269 51

D3463-5RevB

Manufactured No

100

Each

37.0000

8.0000

End Cap

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST 37

46270 37

D3463-7RevB

Manufactured No

100

Each

12.0000

4.0000

Drag Arm

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST 12

46271 12

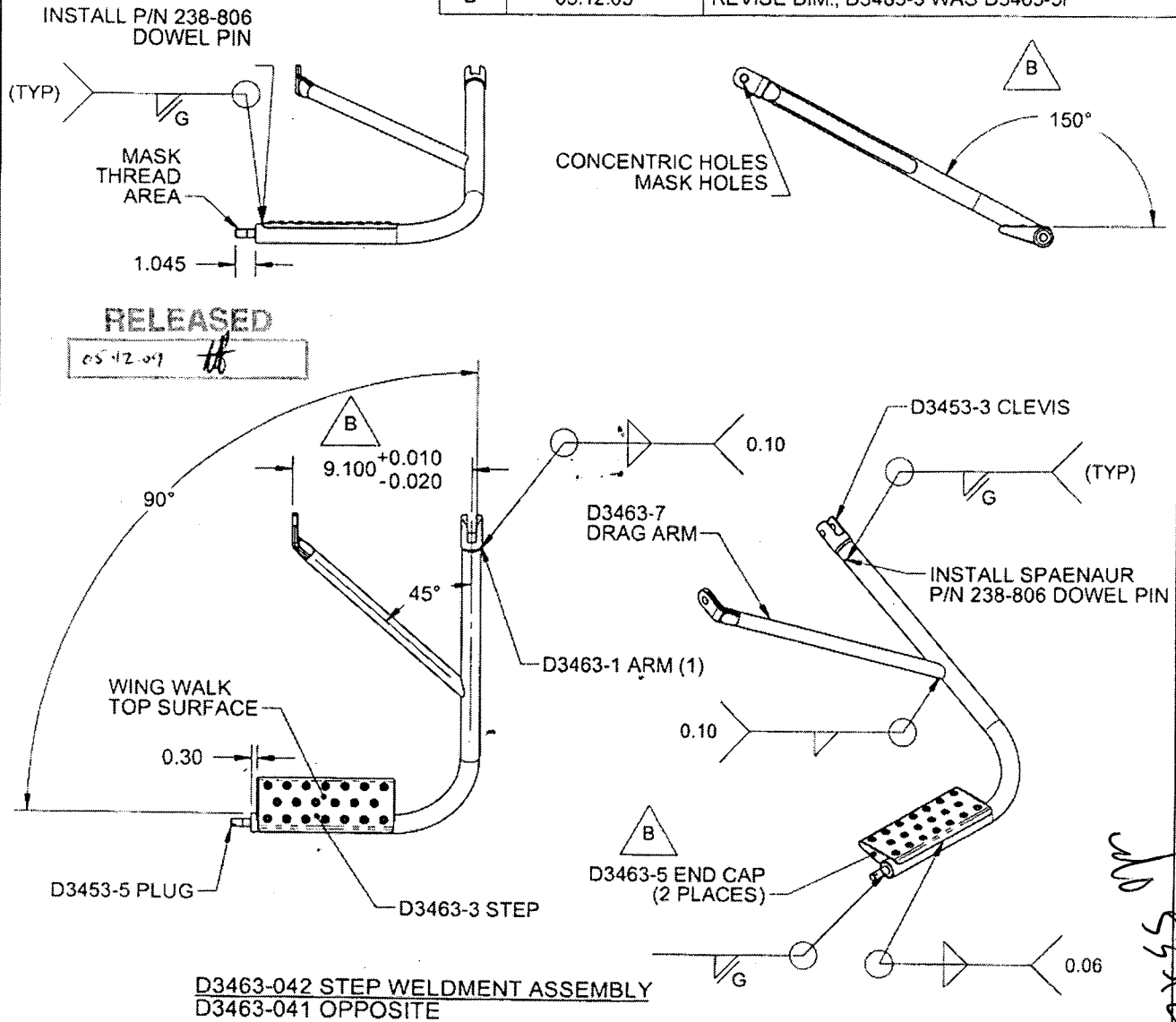
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Shop Packet Print

Page 2

**DART**

|                         |                               |  |                        |
|-------------------------|-------------------------------|--|------------------------|
| DESIGN<br>RF            | DRAWN BY<br>RF                | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA |                        |
| CHECKED<br>H            | APPROVED<br>H                 | DRAWING NO.<br><b>D3463</b>                              | REV. B<br>SHEET 1 OF 4 |
| DATE<br><b>05.12.05</b> | TITLE<br><b>STEP WELDMENT</b> |  | SCALE<br>1:8           |
| A                       | 05.09.20                      | NEW ISSUE  |                        |
| B                       | 05.12.05                      | REVISE DIM.; D3463-5 WAS D3463-5F                        |                        |

**NOTES:**

- 1) WELD PER DART QSI 004
- 2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3  
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL UNMARKED SHARP EDGES 0.005 TO 0.010
- 6) IDENTIFY WITH DART P/N USING FINE POINT PERMANENT INK MARKER

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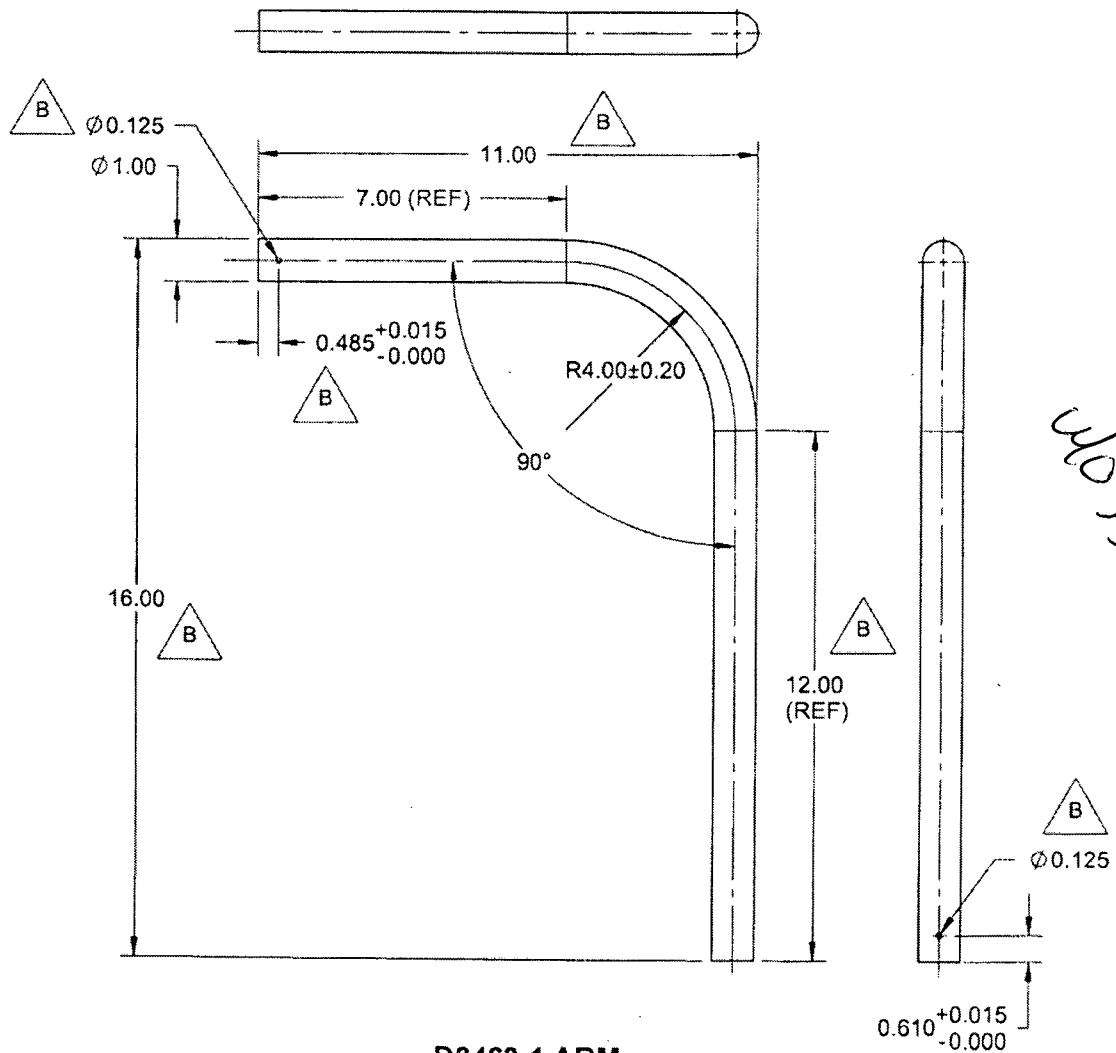
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**DART**

|                         |                         |  |                        |
|-------------------------|-------------------------|--|------------------------|
| DESIGN<br>RF            | DRAWN BY<br>RF          | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA |                        |
| CHECKED<br>[Signature]  | APPROVED<br>[Signature] | DRAWING NO.<br><b>D3463</b>                              | REV. B<br>SHEET 2 OF 4 |
| DATE<br><b>05.12.05</b> |                         | TITLE<br><b>STEP WELDMENT</b>                            | SCALE<br>1:4           |

RELEASED

05.12.05 [Signature]

**D3463-1 ARM****NOTES:**

- 1) MATERIAL: AISI 316/304 SS SEAMLESS TUBING (REF. DART SPEC. M304TR1.000W.120)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL UNMARKED SHARP EDGES 0.005 TO 0.025

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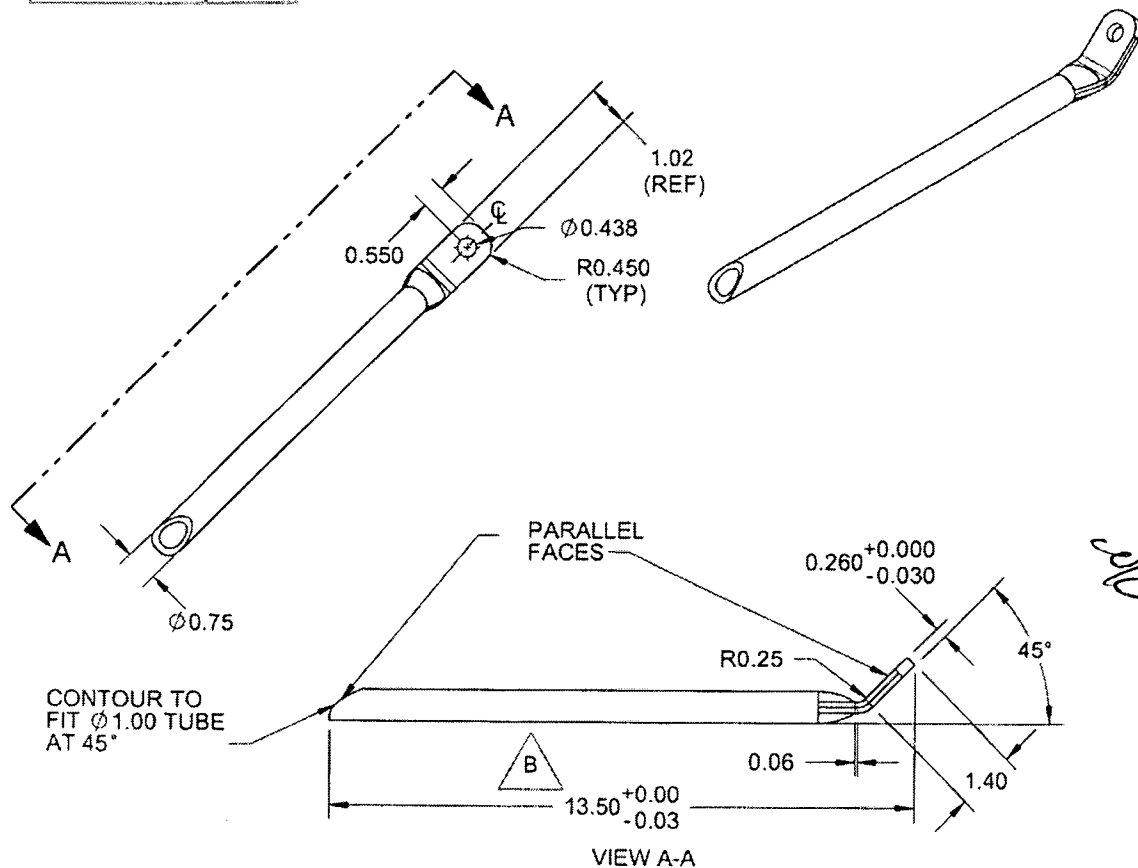


**DART**

|                  |                |  |                        |
|------------------|----------------|--|------------------------|
| DESIGN<br>RF     | DRAWN BY<br>RF | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA |                        |
| CHECKED<br>#     | APPROVED<br>#  | DRAWING NO.<br><b>D3463</b>                              | REV. B<br>SHEET 3 OF 4 |
| DATE<br>05.12.05 |                | TITLE<br><b>STEP WELDMENT</b>                            | SCALE<br>1:4           |

RELEASED

05.12.05

**D3463-7 DRAG ARM****NOTES:**

- 1) MATERIAL: AISI 316/304 SS SEAMLESS TUBING (REF. DART SPEC. M304TR0.750W.120)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL UNMARKED SHARP EDGES 0.005 TO 0.010

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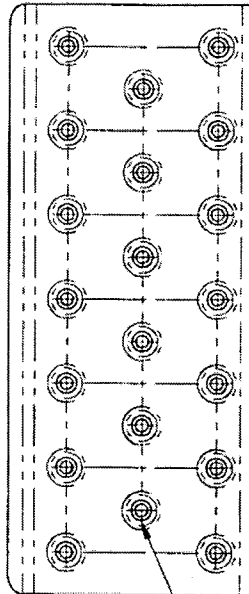
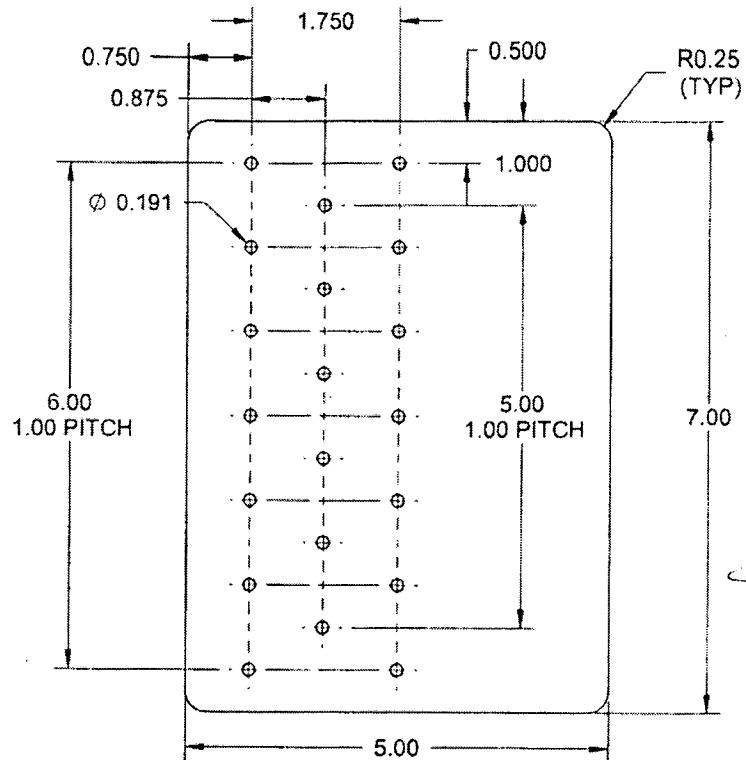
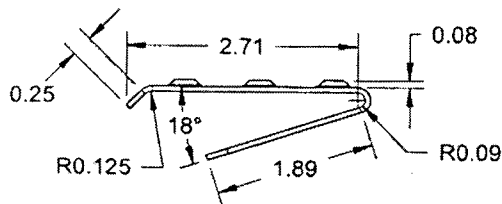
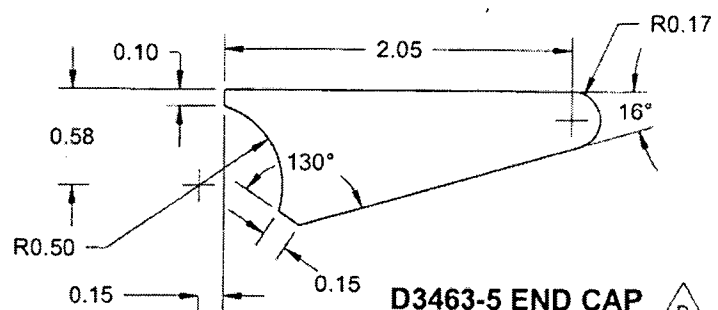
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|                         |                |  |                        |
|-------------------------|----------------|--|------------------------|
| DESIGN<br>RF            | DRAWN BY<br>RF | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA |                        |
| CHECKED<br>#            | APPROVED<br>#  | DRAWING NO.<br><b>D3463</b>                              | REV. B<br>SHEET 4 OF 4 |
| DATE<br><b>05.12.05</b> |                | TITLE<br><b>STEP WELDMENT</b>                            | SCALE<br>1:2           |

**RELEASED**

05.12.05 #

FORM USING  
D3463-3T1**D3463-3F FLAT PATTERN****D3463-3 STEP****D3463-5 END CAP**  
SCALE 1:1**NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET, 0.060 THICK (REF. DART SPEC. M304S16GA)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL UNMARKED SHARP EDGES 0.005 TO 0.010

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